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What is claimed is:

1. A system for automating the testing of optical fiber comprising:

at least one automated test station adapted to guide a first end of the optical fiber to a first testing device and perform a test on the optical fiber; and

an automated conveyor system adapted to transport the optical fiber to the test station.

2. The system of claim 1 wherein said at least one test station is further adapted to:

strip a coating from the first end of the optical fiber.

3. The system of claim 2 wherein said at least one test station is further adapted to:

strip the coating from a second end of the optical fiber; and

guide the second end of the optical fiber to the first testing device.

4. The system of claim 2 wherein said at least one test station is further adapted to:

cleave the first end of the optical fiber.

5. The system of claim 4 wherein said at least one test station is further adapted to:

clean the first end of the optical fiber.

6. The system of claim 4 wherein said at least one test station is further adapted to:

acquire a sample length of the optical fiber; and

perform the test on the sample length of the optical fiber.

7. A system for automating the testing of optical fiber comprising:

a spool upon which the optical fiber is wound;

a first station adapted to automatically:

strip a coating from a first end and a second end of the optical fiber;

cut the first end and the second end of the optical fiber;

a second station which includes a first testing device, one of said first or second stations adapted to:

guide the first end and the second end of the optical fiber to the first testing device;

perform a first test on the optical fiber; and

an automated conveyor system adapted to transport the spool from the first station to the second station.

8. The system of claim 7 wherein:

the first station is further adapted to clean the first end and the second end of the optical fiber; and

the second station is further adapted to cleave the first end and the second end of the optical fiber.

9. The system of claim 7 wherein the second station is further adapted to:

pull the first end and the second end of the optical fiber;

cut a first length of optical fiber from the first end;

cut a second length of optical fiber from the second end; and

discard the first length and the second length.

10. The system of claim 7 wherein:

the first test comprises determining a measurement of the optical attenuation of the optical fiber using optical time domain reflectometry.

11. The system of claim 7 wherein:

the first test comprises determining a measurement of the optical dispersion of the optical fiber.

12. The system of claim 7 further comprising:

a pallet for carrying the spool;

a radio frequency (RF) tag attached to the pallet adapted for containing data, the data including spool identification data, test processing instructions, and test results; and

a plurality of RF tag devices located adjacent to the automated conveyor system adapted to read data from and write data to the RF tag.

13. The system of claim 7 further comprising:

a third station adapted to:

acquire a test sample length of the optical fiber;

guide the test sample length of the optical fiber to a second testing device; and

perform a second test on the test sample length of optical the optical fiber;

wherein the automated conveyor system is further adapted to transport the spool from the second test station to the third test station.

14. A system for automating the testing optical fiber, the optical fiber including a first end and a second end, the system comprising:

a spool upon which the optical fiber is wound;

a first test station, the first test station adapted to:

manipulate the first end and the second end of the optical fiber;

guide the first end of the optical fiber to a first testing device;

perform a first test on the optical fiber;

a second test station, the second test station adapted to:

acquire a test sample length of the optical fiber;

guide the test sample length to a second testing device;

perform a second test on the test sample length of optical fiber; and

an automated conveyor system adapted to transport the spool from the first test station to the second test station.

15. A method for automating the testing of optical fiber comprising the steps of:

acquiring at least one end of optical fiber from an optical fiber storage spool and guiding the at least one end of the optical fiber to an optical fiber testing apparatus; and

testing the optical fiber by the optical fiber testing apparatus.

16. The method of claim 15, further comprising, prior to said acquiring step, transporting said optical fiber which is stored on a fiber storage spool to a location where said fiber is to be acquired and guided to said testing apparatus.

17. The method of claim 15, wherein said testing apparatus is an optical time domain reflectrometer.

18. The method of claim 16, wherein said testing apparatus is an optical time domain reflectrometer.

19. The method of claim 15, after the step of acquiring at least one end, and prior to said guiding, further comprising the steps of:

stripping the coating from the at least one end of the optical fiber by the testing apparatus;

cleaving the at least one end of the optical fiber by the testing apparatus; and

cleaning the at least one end of the optical fiber by the testing apparatus.

20. The method of claim 19, after the step of testing the optical fiber, further comprising the steps of:

cutting a length of optical fiber from the at least one end of the optical fiber by the testing apparatus; and

discarding the length by the testing apparatus.

21. The method of claim 20 further comprising the step of providing a data storage means together with said spool, said data storage means having desired testing, test results, location in

22. The method of claim 15, wherein said acquiring step comprises automatically wrapping said fiber around a cylindrical mandrel.

23. The method of claim 22, wherein said testing apparatus measures fiber cut-off wavelength.

24. A method for automating the testing of optical fiber comprising the steps of:

transporting a length of optical fiber which is stored on a fiber storage spool to a first test station by an automated transportation system;

acquiring a sample length of the optical fiber by a testing apparatus;

guiding the sample length of the optical fiber to an optical fiber tester by the testing apparatus; and

testing the sample length of the optical fiber by the optical fiber tester.

25. The method of claim 24, after the step of acquiring a sample length, further comprising the steps of:

stripping the coating from at least one end of the sample length of optical fiber by the testing apparatus;

cleaving the at least one end of the sample length of the optical fiber by the testing apparatus; and

cleaning the at least one end of the sample length of the optical fiber by the testing apparatus.

26. The method of claim 24, after the step of testing the sample length, further comprising the step of:

discarding the sample length of the optical fiber.

27. The method of claim 24, further comprising, after said testing step, transporting said fiber spool to a second test station.

28. A pallet adapted for carrying a spool of optical fiber comprising:

a mounting device adapted for holding a spool of optical fiber; and

a first structure adapted for holding a first end of the optical fiber such that the first end of the optical fiber extends outward in a such a manner as to provide easy access to the first end.

29. The pallet of claim 28 further comprising:

a second structure adapted for holding a second end of the optical fiber such that the second end of the optical fiber extends outward in a such a manner as to provide easy access to the second end.

30. The pallet of claim 29 wherein:

the first structure is further adapted to allow optical fiber to be unwound from the first end without disturbing the second end of the optical fiber; and

the second structure is further adapted to allow optical fiber to be unwound from the second end without disturbing the first end.

31. The pallet of claim 30 wherein:

the first structure and the second structure are further adapted to allow optical fiber to be unwound from both the first end and the second end simultaneously.

32. The pallet of claim 28 wherein the pallet is further adapted for carrying the spool of optical fiber to an optical fiber test station.

33. The pallet of claim 28 wherein the pallet is further adapted for use with an automated optical fiber test system.

34. The pallet of claim 1 wherein the pallet is further adapted for use with a conveyor system to carry the spool of optical fiber from a first automated test station to second automated test station.

35. The pallet of claim 28 further comprising:

a data storage device attached to the pallet adapted to be read from and written to.

36. The pallet of claim 35 wherein the data storage device identifies the spool of optical fiber and provides a database of at least one test result.

37. A pallet adapted for carrying a spool of optical fiber comprising:

a base;

a spool holding apparatus mounted on the base adapted for holding the spool of optical fiber;

a first feed finger assembly attached to the base adapted for holding a first end of the optical fiber;

a second feed finger assembly attached to the base adapted for holding the second end of the optical fiber;

wherein the pallet is adapted to allow optical fiber to be unwound from the first end without disturbing a second end of the optical fiber, and to allow optical fiber to be unwound from the second end without disturbing the first end.

38. A pallet adapted for carrying a spool of optical fiber comprising:

a base;

a spool holding apparatus mounted on the base adapted for holding the spool of optical fiber;

a first vertical bracket mounted to the base;

a second vertical bracket mounted to the base;

a first feed finger assembly rotationally mounted to the first vertical bracket adapted for holding a first end of the optical fiber and allowing optical fiber to be unwound from the first end without disturbing a second end of the optical fiber; and

a second feed finger assembly mounted to the second vertical bracket adapted for holding the second end of the optical fiber and allowing optical fiber to be unwound from the second end without disturbing the first end.

39. The pallet of claim 38 wherein the spool carrying apparatus comprises a roller assembly including a pair of rollers.

40. The pallet of claim 38 further comprising:

a pickoff assembly rotationally mounted on the first vertical bracket;

a first lead meter including an eyelet extending from the pickoff assembly adapted to contain the optical fiber;

a clutch assembly mounted on the pickoff assembly adapted to engage the spool such that when optical fiber is unwound from the second end, the pickoff assembly, the first lead meter, and the clutch assembly rotate in synchronization with the spool, and when optical fiber is unwound from the second end, the spool remains substantially stationary and the pickoff assembly, the first lead meter, and the clutch assembly rotate.

41. The pallet of claim 40 further comprising:

an upright guide roller mounted on the base adapted to guide the optical fiber;

a secondary roller attached to the second vertical bracket adapted to guide the optical fiber; and

a second lead meter including a second eyelet extending from the second vertical bracket adapted to contain the optical fiber.

42. A spool and pallet system comprising:

a spool of optical fiber having a first end and a second end; and

a pallet holding the spool of optical fiber such that the first end of the optical fiber extends outward in such a manner as to provide easy access to the first end, and such that the second end of the optical fiber extends outward in such a manner as to provide easy access to the second end.

43. The system of claim 42 wherein:

the pallet is adapted to allow optical fiber to be unwound from the first end without disturbing the second end of the optical fiber and to allow optical fiber to be unwound from the second end without disturbing the first end.

44. The system of claim 43 wherein the pallet is further adapted to allow optical fiber to be unwound from both the first end and the second end simultaneously.

45. The system of claim 42 further comprising:

a data storage device attached to the pallet adapted to be read from and written to.

46. The system of claim 42 wherein the spool further comprises:

a primary barrel;

a lead meter barrel; and

an outboard flange separating said primary barrel and said lead meter barrel, said outboard flange including a slot adapted to provide a path for the optical fiber between said primary barrel and said lead meter barrel.

47. A method of loading a spool of optical fiber onto a pallet adapted for carrying the spool comprising the steps of:

placing the spool of optical fiber onto the pallet;

threading a first end of the optical fiber through a first structure adapted for holding the first end such that the first ends extends outward in such a manner as to provide easy access to the first end; and

threading a second end of the optical fiber through a second structure adapted for holding the second end such that the second end extends outward in such a manner as to provide easy access to the second end.

48. A method of testing a spool of optical fiber:

placing the spool of optical fiber onto a pallet such that a first end and a second end of the optical fiber extend outward in such a manner as to provide easy access to both the first end and the second end;

transporting the pallet to a test station;

pulling the first end of the optical fiber to a test device such that a first length of optical fiber is unwound from the spool;

pulling the second end of the optical fiber to the test device such that a second length of optical fiber is unwound from the spool; and

testing the optical fiber wound onto the spool.

49. The method of claim 48 wherein:

the step of pulling the first end of the optical fiber does not disturb the second end of the optical fiber.

50. The method of claim 48 wherein:

the step of pulling the second end of the optical fiber does not disturb the first end of the optical fiber.

51. The method of claim 48 further comprising the steps of:

cutting a portion of the first length of optical fiber pulled from the spool; and

cutting a portion of the second length of optical fiber pulled from the spool.

52. A method of testing a spool of optical fiber:

placing the spool of optical fiber onto a pallet such that a first end of the optical fiber extends outward in such a manner as to provide easy access to the first end;

transporting the pallet to a test station;

pulling the first end of the optical fiber to a test device such that a first length of optical fiber is unwound from the spool;

cutting a sample length of the first end of the optical fiber;

guiding the sample length of optical fiber to a test device; and

performing a test on the sample length of optical fiber.